

REMARKS

Reconsideration and allowance of the subject application are respectfully requested. Claims 1-11 are all the claims pending in the application. The claim set now includes new claim 11, but no new matter is added. Applicant respectfully submits that the pending claims define patentable subject matter.

PRIOR ART REJECTIONS

Claims 1, 7, and 8 stand rejected under 35 U.S.C. 102(e) as allegedly being anticipated by Fattaruso (U.S. 6,792,019).

Claim 2 stands rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Fattaruso in view of Schrodinger et al (U.S. 2005/0025201).

Claim 3 stands rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Fattaruso in view of Mukherjee (U.S. 6,226,322).

Claims 5, 6, 9, and 10 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Fattaruso in view of Giles (U.S. 4,612,671).

Applicant respectfully traverses the 35 U.S.C. §§ 102 and 103 rejections of the claims as set forth below.

ARGUMENTS

Applicant submits that the applied references, individually or combined as a whole, fail to teach or suggest the unique features of claim 1.

Claim 1 requires:

Circuit for driving a semiconductor laser, in particular a vertical cavity surface-emitting laser, comprising a differential amplifier for driving the semiconductor laser directly, wherein
a semiconductor laser to be connected to the circuit is differentially driven by means of the differential amplifier,
a first output of the differential amplifier being direct-current-coupled to a first terminal of the semiconductor laser and
a second output of the differential amplifier being alternating-current-coupled to a second terminal of the semiconductor laser.

Fattaruso, including the circuit in Figure of 3, fails to teach or suggest the features of claim 1.

Fattaruso does not disclose a differential amplifier for driving the semiconductor laser directly, where a semiconductor laser to be connected to the circuit is differentially driven by means of the differential amplifier.

Although the Examiner asserts that differential pair 52 (transistors 58 and 60) in Figure 3 is the differential amplifier, the laser diode 32 is only in a single ended configuration. That is, the laser diode 32 is not being differentially driven by the differential pair 52, as required by claim 1. Further, the two outputs (from transistors 58 and 60) of the differential pair 52 do not directly drive the laser diode 32, as required by claim 1. Moreover, Fattaruso indicates that the circuit in Figure 3 is in a single ended configuration only. Fattaruso states “Fig. 9 shows a similar circuit to the one in Fig. 3, but with a differential output configuration instead of the single ended configuration shown in Fig. 3 [emphasis added]” (col. 4, lines 1-3). Just because a differential amplifier (differential pair 52) is used in the circuit, as seen above, this fact alone does not

necessitate that the laser diode 32 be driven differentially. Consequently, Fattarusio including the circuit in Figure 3 cannot be said to anticipate the unique features of claim 1.

Furthermore, Applicant previously argued in the Amendment filed March 2, 2006 that the laser diode 32 is driven in single mode only, with the difference being that the laser diode 32 is driven against VCC instead of ground. Particularly, Fattarusio does not teach or suggest a first output of the differential amplifier being direct-current-coupled to a first terminal of the semiconductor laser, as required by claim 1. The anode (first terminal) of laser diode 32 is connected to VCC and is neither direct current coupled to resistor 34 nor inductor 40, as maintained by the Examiner. Unlike claim 1, since the circuit in Figure 3 of Fattarusio is a single ended configuration only (col. 4, lines 1-3), this further bolsters Applicant's argument that the laser diode 32 is only AC coupled to the circuit, not DC coupled, because the laser diode is not being driven differentially.

For at least the forgoing reasons, independent claim 1 is patentable over Fattarusio. Furthermore, claim 1 is patentable over Fattarusio, Schrodinger, Mukherjee, and Giles individually or combined in any combination thereof and is not anticipated or rendered obvious by the teachings therein. Therefore, the 35 U.S.C. §§ 102 and 103 rejections of claims 1-10 should be withdrawn.

ALLOWABLE SUBJECT MATTER

Claim 4 is objected to as being dependent upon a rejected base claim. Applicant has herein traversed the rejection of the base claim and respectfully requests the Examiner to withdraw this objection to claim 4 and to allow it in its present form.

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. APPLICATION NO. 10/760,397

ATTORNEY DOCKET NO. Q79429

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly invited to contact the undersigned attorney at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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